

THE LONE STAR TICK, *AMBLYOMMA AMERICANUM*
(LINNAEUS): NEW DISTRIBUTION RECORD FOR
NORTH AMERICA (ACARINA: IXODIDAE)

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Abstract.—A new distribution record for *Amblyomma americanum* (L.) within northeastern New York State is established. Previous reports indicate this species was limited to extreme southeastern sections of the state. The finding of three adult ticks in Saratoga County increases the recorded distribution of this species.

The Lone Star tick, *Amblyomma americanum* (L.), is known to be well established throughout the southern section of the United States (Bishopp and Trembley 1945; Burgdorfer 1969). Previous occurrences of *A. americanum* from New York have been limited, reported only from the southeastern sections of the state, most notably Suffolk County (Good 1972), Nassau County (Benach pers. comm. 1982) and New York City (Rehn 1953; Benach pers. comm. 1982). One engorged tick was removed from a human in Catskill, Greene County, N.Y. in 1954 but it was reported that this person had recently visited the Long Island area previous to the discovery (Jamnback 1969). No other reports from upstate New York have occurred during the previous 50 years (Anastos et al. 1978).

On 8 June 1979, one adult male *A. americanum* was found preparing to attach to the upper leg of a human male adult. The tick was encountered during a walk through an old-field type habitat in the Town of Wilton, Saratoga County, N.Y. On 12 June 1980, one adult female tick was removed from a human male who had been walking in a field in the Town of Greenfield, Saratoga County. Subsequent field collections failed to recover any additional ticks. An engorged female tick was removed from a hospital emergency room female patient on 28 August 1981. The tick was likely encountered near the patients home in the Town of Moreau, Saratoga County. The general locations of these three reports are found in Fig. 1.

These collections indicate that an apparent indigenous, overwintering population of *A. americanum* now has a limited distribution in Saratoga County. The medical significance of this new record may be important due to the Lone Star tick's capability as a vector of Rocky Mountain spotted fever

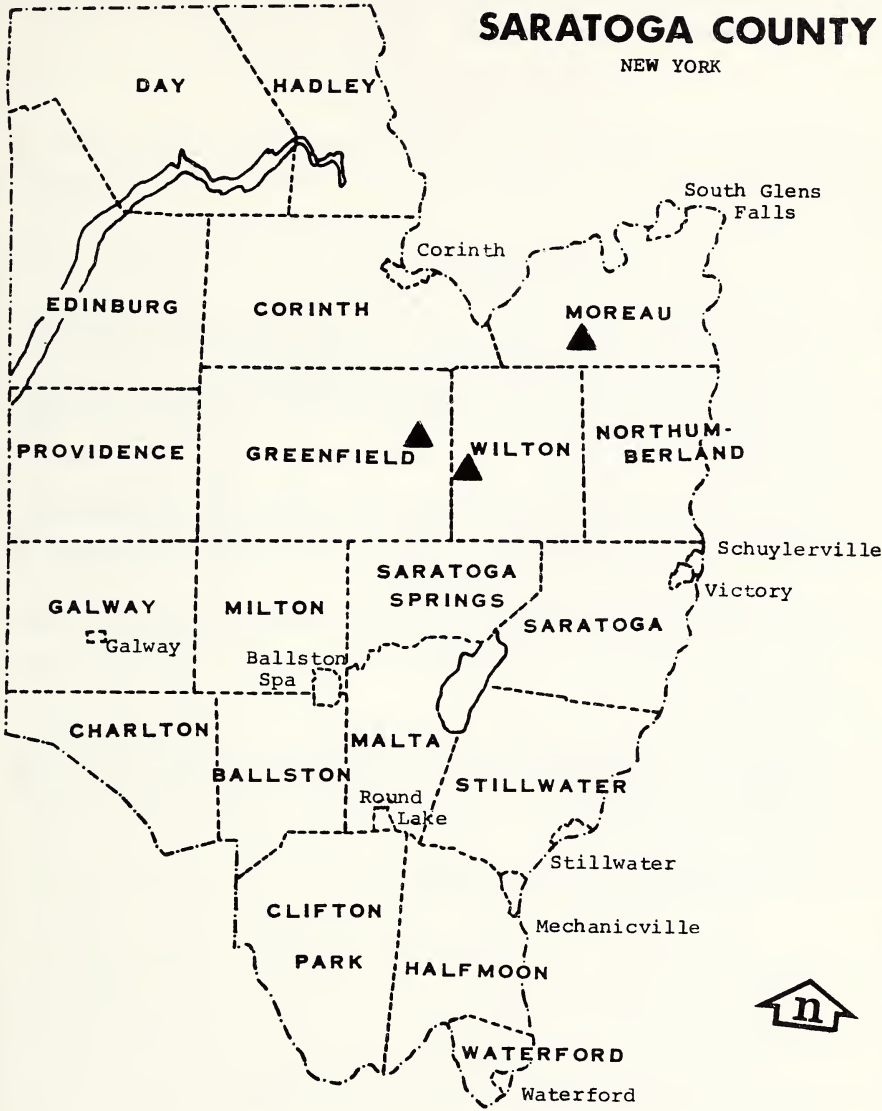


Fig. 1. Known distribution of *Amblyomma americanum* (L.) in Saratoga County, New York.

(Harwood and James 1979) which is known to be endemic in *Dermacentor variabilis* (Say) populations near these areas in Saratoga County (McKeon et al. in preparation for publication).

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Literature Cited

- Anastos, Doss, Furr and Roach, eds. 1978. Index Catalogue of Medical and Veterinary Zoology, Special Publication No. 3, Ticks and Tick Borne Diseases IV: Geographical Distribution of Ticks. U.S. Dept. of Agric., Sci. Ed. Admin. 462 pp.
- Bishopp, F. C. and H. L. Trembley. 1945. Distribution and hosts of certain North American ticks. *J. Parasit.* 31(1):1-54.
- Burgdorfer, W. 1969. Ecology of tick vectors of American spotted fever. *Bull. Wld. Hlth. Org.* 40:375-381.
- Good, N. E. 1972. Tick locality and host records from Long Island and southeastern New York State. *Ent. News* 83:165-168.
- Harwood, R. F. and M. T. James. 1979. *Entomology in Human and Animal Health*, 7th Edition. Macmillan Publ. Co., New York. 548 pp.
- Jamnback, H. 1969. Bloodsucking flies and other outdoor nuisance arthropods of New York State. N.Y.S. Ed. Dept. Memoir 19. 90 pp.
- Rehn, J. W. H. 1953. The lone star tick in Staten Island, New York (Acarina: Ixodidae). *Ent. News* 64(2):46.

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